

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. An identifier indicating the status of each claim is provided.

Listing of Claims

1. (Currently Amended) An editing device to edit a high-definition television signal, the editing device comprising:

a first decoder and a second decoder which decompress respective compressed high-definition television video data transferred from the computer; and

edit processing means for performing edit processing on the high-definition television video data decompressed by the first decoder and the high-definition television video data decompressed by the second decoder, a result of edit processing performed by the edit processing means being output, wherein the edit processing means comprises:

an effector for applying a special effect to the high-definition television video data decompressed by the first decoder,

wherein the high-definition television video data decompressed by the first decoder and the high-definition television video data decompressed by the second decoder for one frame, are transferred, in each time period for one frame, in parallel to a first PCI card and a second PCI card, respectively,

wherein the edit processing means and first decoder are contained on the first PCI card, and the second decoder is contained on the second PCI card, the first PCI card being directly connected to the second PCI card, and

wherein the first PCI card and the second PCI card have PCI connectors for connecting with a motherboard of the computer by the PCI connectors, and are installed in PCI slots of the computer; and

selection means for selecting a type of special effect and inputting an effect parameter,

wherein, when the type of special effect is selected and the effect parameter is input via special effect selection button on an operation screen of the computer:

an effect starting command is sent to the first PCI card from the computer;

the effect parameter is stored in a memory of the computer;

the effect starting command is then sent to the edit processing means from the first PCI card;

the edit processing means then sends the effect starting command to a central processing unit of the computer;

the central processing unit causes the effect parameter that is stored in the memory of the computer to be sent to the edit processing means;

the edit processing unit writes the effect parameter to a memory of the edit processing unit;

the central processing unit writes a calculation starting instruction to the memory of the edit processing unit;

the effector reads the calculation starting instruction and reads the effect parameter from the memory of the edit processing unit and calculates a read address of data for each pixel using the effect parameter;

the effector then changes a status in the memory of the effector indicating that the high-definition television video data decompressed by the first decoder is able to be received;

the central processing unit then reads the status in the memory of the effector and causes the high-definition television video data decompressed by the first decoder to be sent to the effector;

the effector performs processing per one frame of the high-definition television video data decompressed by the first decoder within a time period for a predetermined number of frames.

2. (Currently Amended) The editing device according to claim 1,

wherein the edit processing means comprises:

~~an effector for applying a special effect to the high-definition television video data decompressed by the first decoder; and~~

combining means for combining the high-definition television video data to which the special effect is applied by the effector and the high-definition television video data decompressed by the second decoder.

3. (Original) The editing device according to claim 1, further comprising:

an output connector for high-definition television data,

wherein the result of edit processing performed by the edit processing means is output from the output connector.

4. (Original) The editing device according to claim 1, further comprising:

an encoder for compressing the high-definition television video data on which the edit processing is performed by the edit processing means,

wherein the high-definition television video data compressed by the encoder is transferred to the computer.

5. (Original) The editing device according to claim 1, further comprising:

converting means for converting the high-definition television video data on which the edit processing is performed by the edit processing means into standard-definition television video data,

wherein the standard-definition television video data converted by the converting means is transferred to the computer.

6. (Original) The editing device according to claim 1, further comprising:

an input connector for uncompressed high-definition television data; and

selecting means for selecting one of high-definition television video data input from the input connector and the high-definition television video data decompressed by the first decoder and for supplying the selected high-definition television data to the edit processing means,

wherein the edit processing means performs edit processing on the high-definition television video data selected by the selecting means and the high-definition television video data decompressed by the second decoder.

7. (Original) The editing device according to claim 1, wherein the editing device comprises at least one peripheral component interconnect card.

8. (Currently Amended) An editing apparatus for a high-definition television signal, the editing apparatus comprising:

a computer for transferring compressed first high-definition television video data and compressed second high-definition television video data; and

an editing device that includes a first decoder and a second decoder which decompress the compressed first and second high-definition television video data, respectively, and edit processing means for performing edit processing on the decompressed first high-definition television video data and the decompressed second high-definition television video data, a result of edit processing performed by the edit processing means being output, wherein the editing device comprises:

an effector for applying a special effect to the high-definition television video data decompressed by the first decoder,

wherein the compressed first high-definition television video data and the compressed second high-definition television video data for one frame, are transferred, in each time period for one frame, in parallel from the computer to a first PCI card and a second PCI card, respectively, wherein the edit processing means and first decoder are contained on the first PCI card, and the second decoder is contained on the second PCI card, the first PCI card being directly connected to the second PCI card, and

wherein the first PCI card and the second PCI card have PCI connectors for connecting with a motherboard of the computer by the PCI connectors, and are installed in PCI slots of the computer; and

a selection unit for selecting a type of special effect and inputting an effect parameter,

wherein, when the type of special effect is selected and the effect parameter is input via special effect selection button on an operation screen of the computer:

an effect starting command is sent to the first PCI card from the computer;

the effect parameter is stored in a memory of the computer;

the effect starting command is then sent to the edit processing means from the first PCI card;

the edit processing means then sends the effect starting command to a central processing unit of the computer;

the central processing unit causes the effect parameter that is stored in the memory of the computer to be sent to the edit processing means;

the edit processing unit writes the effect parameter to a memory of the edit processing unit;

the central processing unit writes a calculation starting instruction to the memory of the edit processing unit;

the effector reads the calculation starting instruction and reads the effect parameter from the memory of the edit processing unit and calculates a read address of data for each pixel using the effect parameter;

the effector then changes a status in the memory of the effector indicating that the high-definition television video data decompressed by the first decoder is able to be received;

the central processing unit then reads the status in the memory of the effector and causes the high-definition television video data decompressed by the first decoder to be sent to the effector;

the effector performs processing per one frame of the high-definition television video data decompressed by the first decoder within a time period for a predetermined number of frames..

9. (Currently Amended) The editing apparatus according to claim 8,

wherein the edit processing means comprises:

~~an effector for applying a special effect to the high-definition television video data decompressed by the first decoder; and~~

combining means for combining the high-definition television video data to which the special effect is applied by the effector and the high-definition television video data decompressed by the second decoder.

10. (Original) The editing apparatus according to claim 8,

wherein the editing device further comprises:

an output connector for high-definition television data,

the result of edit processing performed by the edit processing means being output from the output connector.

11. (Original) The editing apparatus according to claim 8,

wherein the editing device further comprises:

an encoder for compressing the high-definition television video data on which the edit processing is performed by the edit processing mean, the high-definition television video data compressed by the encoder being transferred to the computer.

12. (Original) The editing apparatus according to claim 8,

wherein the editing device further comprises:

converting means for converting the high-definition television video data on which the edit processing is performed by the edit processing means into standard-definition television video data,

the standard-definition television video data converted by the converting means being transferred to the computer.

13. (Original) The editing apparatus according to claim 8,

wherein the editing device further comprises:

an input connector for uncompressed high-definition television data; and

selecting means for selecting one of high-definition television data input from the input connector and the high-definition television video data decompressed by the first decoder and for supplying the selected high-definition television data to the edit processing means, and wherein the edit processing means performs edit processing on the high-definition television video data selected by the selecting means and the high-definition television video data decompressed by the second decoder.

14. (Original) The editing apparatus according to claim 8, wherein the editing device comprises at least one peripheral component interconnect card.

15. (Currently Amended) An editing method for editing a high-definition television signal using a computer, the editing method comprising:

a transferring step of transferring compressed first high-definition television video data and compressed second high-definition television video data for one frame, in each time period for one frame, in parallel from the computer to a first PCI card and a second PCI card, respectively;

a decompressing step of decompressing, in the editing device, the compressed first high-definition television video data and the compressed second high-definition television video data which are transferred in the transferring step;

an editing step of performing, in the editing device, edit processing on the first high-definition television video data and the second high-definition television video data which are decompressed in the decompressing step, wherein the editing step comprises:

an applying step for applying a special effect to the high-definition television video data decompressed by the first decoder; and

an outputting step of outputting a result of edit processing performed in the editing step from the editing device,

wherein the editing step and the decompressing of the compressed first high-definition television video data occur on the first PCI card, and the decompressing of the second high-definition television video data occurs on the second PCI card, the first PCI card being directly connected to the second PCI card, and

wherein the first PCI card and the second PCI card have PCI connectors for connecting with a motherboard of the computer by the PCI connectors, and are installed in PCI slots of the computer; and

a selection step for selecting a type of special effect and inputting an effect parameter,

wherein, when the type of special effect is selected and the effect parameter is input via special effect selection button on an operation screen of the computer:

an effect starting command is sent to the first PCI card from the computer;

the effect parameter is stored in a memory of the computer;

the effect starting command is then sent to the edit processing means from the first PCI card;

the edit processing means then sends the effect starting command to a central processing unit of the computer;

the central processing unit causes the effect parameter that is stored in the memory of the computer to be sent to the edit processing means;

the edit processing unit writes the effect parameter to a memory of the edit processing unit;

the central processing unit writes a calculation starting instruction to the memory of the edit processing unit;

the effector reads the calculation starting instruction and reads the effect parameter from the memory of the edit processing unit and calculates a read address of data for each pixel using the effect parameter;

the effector then changes a status in the memory of the effector indicating that the high-definition television video data decompressed by the first decoder is able to be received;

the central processing unit then reads the status in the memory of the effector and causes the high-definition television video data decompressed by the first decoder to be sent to the effector;

the effector performs processing per one frame of the high-definition television video data decompressed by the first decoder within a time period for a predetermined number of frames..

16. (Original) The editing method according to claim 15,
wherein, in the editing step, a special effect is applied to the first high-definition television video data, and the first high-definition television video data to which the special effect is applied and the second high-definition television video data are combined.

17. (Original) The editing method according to claim 15,
wherein, in the outputting step, the result of edit processing performed in the editing step is output from a high-definition television signal output-connector provided at the editing device.

18. (Original) The editing method according to claim 15, further comprising:
a compressing step of compressing, in the editing device, the high-definition television video data on which the edit processing is performed in the editing step,
wherein, in the outputting step, the high-definition television video data compressed in the compressing step is transferred to the computer.

19. (Original) The editing method according to claim 15, further comprising:
a converting step of converting, in the editing device, the high-definition television video data on which the edit processing is performed in the editing step into standard-definition television video data,
wherein, in the outputting step, the standard-definition television video data converted in the converting step is transferred to the computer.

20. (Original) The editing method according to claim 15, further comprising:
a selecting step of selecting, in the editing device, one of high-definition television video data input from an uncompressed high-definition television data input-connector provided at the editing device and the first high-definition television video data decompressed in the decompressing step,
wherein, in the editing step, the high-definition television video data selected in the selecting step and the second high-definition television video data are subjected to edit processing.

21. (Original) The editing method according to claim 15,
wherein the editing device comprises at least one peripheral component interconnect card.

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